

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/019,358	10/24/2001	Tetsuroh Nakamura	5077-000070	5077-000070 6274	
27572	7590 10/28/2003		EXAMINER		
HARNESS, DICKEY & PIERCE, P.L.C.			NGUYE	NGUYEN, JUDY	
P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			ART UNIT	PAPER NUMBER	
2200 1222220, 10000			2861		
			DATE MAILED: 10/28/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/019,358	NAKAMURA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Judy Nguyen	2861			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of the period of the period of the period for reply will, by statute and reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. & 133).			
1) Responsive to communication(s) filed on	·				
2a) This action is FINAL. 2b) Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) 1-22 is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) is/are rejected.		•			
7)⊠ Claim(s) <u>22</u> is/are objected to:	•				
8) Claim(s) <u>1-21</u> are subject to restriction and/or election requirement. Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) S. Patent and Trademark Office	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit: 2861

DETAILED ACTION

Claim Objections

Claim 22 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 22 has not been further treated on the merits.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-7, drawn to an ink jet head.

Group II, claims 8, 13/8, 16/8, 17/16/8, 21/8 drawn to an ink jet head.

Group III, claims 9, 10, 11, 12/(10, 11), 13/9, 16/9, 17/16/9, 18/9, 21/9 drawn to an ink jet head.

Group IV, claims 14, 16/14, 17/16/14, 19/14, 20/14, 21/14 drawn to an ink jet head.

Group V, claims 15, 16/15, 17/16/15, 18/15, 19/15, 20/15, 21/15 drawn to an ink jet head.

Application/Control Number: 10/019,358

Art Unit: 2861

NOTE: Applicant should note that if any of Group II-V is elected, then applicant must rewrite the dependent claims of the elected Group to depend only to the claims of the elected Group so that no claim of the elected claims is read on the non-elected invention.

The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I lacks at least the technical features of a driver IC side portion of the head body being made of the same material as the driver IC as recited in Groups II and III and flip chip bonding as recited in Group III.

Group II lacks at least the technical features of flip chip bonding and body part recited in Group III.

Group III lacks at least the technical features of a driver IC side portion of the head body being made of material whose coefficient of linear expansion is substantially equal to that of the driver IC as recited in Groups IV and V.

Group IV lacks at least the technical feature of flip chip bonding as recited in Group V.

Groups IV and V lack at least the technical features the head body being made of the same material as the driver IC as recited in Groups II and III.

Please note that the list of technical features listed above is only examples. There are too many different technical features to list them all.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 10/019,358

Art Unit: 2861

Applicant is reminded that upon the cancellation of claims to a non-elected invention,

the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of

Page 4

the currently named inventors is no longer an inventor of at least one claim remaining in

the application. Any amendment of inventorship must be accompanied by a request

under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Judy Nguyen whose telephone number is (703) 305-

7062. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ben Fuller can be reached on (703) 308-0079. The fax phone number for

the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0956.

Judy Nguyen

Primary Examiner

October 24, 2003